

Joint Strike Fighter (JSF) Transition Plan



The Joint Strike Fighter (JSF) will be the next generation strike-fighter for the U.S. Marine Corps, Air Force, and Navy. The JSF family of aircraft includes the short take off, vertical landing (STOVL) variant for the Marine Corps, conventional takeoff and landing (CTOL) for the Air Force, and aircraft carrier-capable (CV) variant for the Navy. Commonality between the variants helps reduce both development and lifecycle costs, and will result in the greatest “bang for the buck” when compared to developing three separate aircraft. The JSF will replace the AV-8B and F/A-18A/C/D in the Marine Corps, the F-16C and A-10 in the Air Force, and the F/A-18AC in the Navy.

The F-35 will incorporate advanced mission systems, including the Active Electronically Scanned Array (AESA) radar, Electro-Optical Targeting System (EOTS), and Distributed Aperture System (DAS). The AESA, EOTS, and DAS will be incorporated into a pilot’s helmet-mounted display system, negating the need for a traditional heads-up display in the cockpit.

The Marine Corps’ F-35B will be capable of operating from Carrier and Expeditionary Strike Groups, main operating bases, and austere sites ashore. The STOVL F-35B JSF will provide the Marine Corps with a low observable, state-of-the-art, high performance, multi-role offensive aircraft. The JSF Operational Requirements Document stipulates that the F-35B will have a 450-nautical mile combat radius and be capable of 550-foot short takeoffs with a full internal payload (two 1,000-pound class weapons and two air-to-air missiles). The U.K.’s Royal Air Force and Royal Navy will also use the STOVL variant.

The Corps will employ the F-35B to execute five of the six functions that Marine Corps aviation performs. This remarkable breadth of employment will allow the Marine Corps to decrease its TacAir inventory, while increasing lethality, survivability, and supportability when compared to legacy aircraft. The Marine Aviation procurement requirement for STOVL F-35B JSF is 420 aircraft. This quantity reflects a reduction of 189

aircraft from the program of record and includes deactivations, reduced Primary Aircraft Authorized, and reduced overhead percentages, as a result of the DoN's TacAir Integration Plan.

The current JSF acquisition strategy continues to reflect the Marine Corps' vision of an "all-STOVL" force. In accordance with a Memorandum of Understanding of August 2002 between the Secretary of the Navy, Commandant of the Marine Corps, and the Chief of Naval Operations, the Marine Corps' strategy will be maintained until a fair and equitable analysis of the CV and STOVL variants can be conducted.

Once the F-35B begins entering ser-

vice, the Marine Corps will begin retirement of AV-8Bs and F/A-18 Hornets. All legacy strike TacAir platforms should be retired by 2023. As the TacAir integration plan progresses, the Corps will explore the feasibility of incorporating an airborne electronic attack capability into the baseline F-35 to address the eventual retirement of EA-6B Prowlers.

The STOVL F-35B JSF is absolutely critical to the success of the Marine Corps, as it will solve the significant problems of age and attrition currently facing Marine TacAir. The combination of stealth, basing flexibility, and superior performance will revolutionize air warfare and Naval Aviation in the 21st Century.